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Subjects Used in JEAB Articles: Is the Snark a Pigeon?

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In a provocative editorial, Nevin (1982) indicated that relatively few studies published in the Journal of the Experimental Analysis of Behavior (JEAB) employed human subjects. Given this, one might question what species do appear frequently in recent issues of the journal and whether there have been Significant changes across time in the kinds of animals studied. To answer these questions, we determined the species used in each research article published in JEAB from 1958 through 1981. One of three primary observers recorded the species used in each empirical study published over an eight-year period (1958-1965, 1966-1973, 1974-1981); a fourth observer independently recorded species used in each article published in 1964, 1971, and 1980. In all cases, the species recorded by this observer agreed perfectly with those recorded by the primary observer. After an initial analysis that determined the number of studies devoted to each individual species, data were pooled into the five categories of pigeons, rats, humans, nonhuman primates, and other species. This last category included alligators, bees, blackbirds, cats, chickens, chinchillas, cows, crows, dogs, dolphins, ducks, Siamese fighting fish, goldfish, gerbils, goats, guinea pigs, hamsters, one horse, mice, mynah birds, octopi, porpoises, quail (Bobwhite and Japanese), sea lions, turtles, and vultures.

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Figure 1 shows the proportion of arutilizing subjects from categories across blocks of three years. Four aspects of the data bear mention. First, from the journal's inception, rats and pigeons have been the most popular subjects. Second, the relative proportion of studies employing rats has progressively decreased over time. Third, pigeons were less popular than rats early in JEAB's history, but have enjoyed a steady rise in popularity; they were used in over half of the studies published in each three-year block from 1970 to 1981. Fourth, nonhuman primates, humans, and various other organisms have always served as subjects in a sizeable minority of JEAB studies; there are no strong temporal trends in the proportion of articles devoted to these three subject categories.

The dramatic increase in the proportion of JEAB studies devoted to pigeons is interesting, although the factors responsible for it and its significance are speculative. Perhaps the many criticisms of rats as subjects (e.g., Beach, 1950) were instrumental in the birds' rise to favor. Undoubtedly practicality and inertia contributed to the increased use of pigeons; the birds are cheap and long-lived, and once a pigeon lab is established, it is an expensive matter to switch to nonavian subjects. Further, pigeons are well suited for investigations of many phenomena of established interest to behavioral psychologists—autoshaping, stimuluscontrolled responding, and performance under concurrent schedules are three current examples.

A possible danger exists, however, in that topics of interest may be dictated by the use of pigeons as subjects, not the converse as would be hoped. How fre-

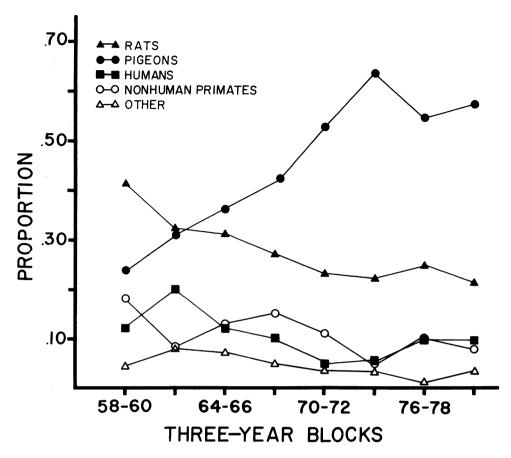


FIGURE LEGEND

FIGURE 1. The relative proportion of JEAB studies devoted to each of five categories of species across blocks of three years.

quently this happens is not known, but it is apparent that submissions to *JEAB* have decreased in recent years (Nevin, 1982) and that applied behavior analysts now pay the journal little heed (Poling, Picker, Grossett, Hall-Johnson, and Holbrook, 1981).

Although it is patently unfair to blame the poor pigeon for these unfortunate happenings, they do suggest that the time is right for evaluating the past and present status of the experimental analysis of behavior. As Nevin (1982) suggests, this includes both topics and species studied. Sad indeed will it be if some future writer, taking a cue from Frank Beach (1950) and his metaphorical use of Lewis Carroll's poem "The Hunting of the Snark," eulogizes past JEAB authors, saying:

"They found the Snark of Animal Behavior, which proved to be a pigeon, and suddenly and softly vanished away."

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